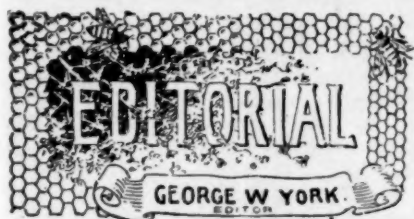


MASSACHUSETTS
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THE AMERICAN
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BEE JOURNAL

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Saying Nothing is sometimes the kindest thing you can say of some people.

Somnambulist, in the "Progressive Bee-Keeper" for November, gives a very good condensed report of the St. Joseph convention. Sommy knows a good thing when she (or he) sees it; and also knows how to tell about it.

Mrs. Chas. White, of Aurora, Nebr., died from heart disease Oct. 18. This sad announcement was given in the "Nebraska Bee-Keeper" for October. Our sincerest sympathies are with Bro. White and his family in their severe affliction.

The Kansas Farmer, published at Topeka, Kans., contained in its issue for Oct. 24, the most interesting condensed reports of the St. Joseph convention that we have seen in any of our agricultural exchanges. The "Kansas Farmer" is one of the brightest and best farm papers published in the West. Its representative at the convention, Mr. H. J. Newberry, is a wide-awake gentleman, with Western ideas of push and pluck well developed. He "gets there," consequently.

Editor Holtermann, in the "Canadian Bee Journal" for November, quite enthusiastically congratulates Canadian bee-keepers upon his success in taking the next North American convention to Toronto, Ont. He did make a most earnest plea for it, at St. Joseph, and so he is probably excusable for feeling somewhat elated over what he terms their "Victory."

One thing is certain—if all is well, the Toronto meeting in 1895 will be a grand one. Those "Canucky cousins" of ours do have a way of turning out to conventions that almost equals the "swarming" of the bee-folks in "the Fatherland." So we are looking forward for the biggest and best meeting, next year, that the North American has ever held. And we don't expect to be disappointed, either.

Editor Leahy's Wife has been quite sick for two months, we regret to learn. Her illness has caused Bro. Leahy to lose so much sleep that he hasn't yet felt equal to the task of writing up an account of his trip to St. Joseph for his paper—the "Progressive Bee-Keeper." We hope Mrs. L.'s recovery may be speedy and complete, so that her good husband may tell his readers all about his St. Joseph experiences.

Willie Atchley—one of Mrs. Atchley's sons—will go through the whole program of queen-rearing—(dipping cells, grafting, moving cells, etc.)—at the Mid-winter Bee-Meeting to be held in Beville, Tex., on Dec. 27 and 28. This feature alone would justify an extra effort to attend. As Willie is called "the greatest queen-rearer in the world," "how he does it" would be worth seeing.

The Convention Report is entirely omitted in this number, for the simple reason that no "copy" came in time to put into it. We waited as long as we dared, and then finally had to put in other matter. We regret the delay very much indeed, as we had hoped to crowd through the whole Report as rapidly as we possibly could, but through some hook or crook we are prevented in carrying out our plans. It is no fault of ours, however, for we have stood ready to do our part; but if the matter is not sent to us in time, we can't very well publish it promptly. Doubtless there is a good reason for the delay outside of this office, and we will be glad to announce it as soon as we learn it.

To Keep Ants Away.—In a recent issue of the "Old Homestead," we read this about keeping ants away, and as it may help some bee-keeper who is troubled by ants, we give it a place here:

Rub a light film-coat of balsam Peru around near the bottom of table or kitchen safe legs—just a narrow band will do—and renew the balsam every two or three weeks. This will keep ants away from tables, kitchen safes, etc., and what they hold or contain, provided there is no other ant-way than up the legs. One drop of balsam Peru spread around the upper part of a syrup bottle will keep the ants away for months. Boil one ounce of balsam Peru in one gallon of rain-water for half an hour, and sponge this water, while hot, over wooden floors and walls, and it will keep ants away for a long time.

A Mutual Admiration Society—whatever that may mean, and wherever it may be located—received quite a little attention at the hands of Bro. Hutchinson in the October "Review." After saying several good things in regard to speaking and writing kind words about each other, Bro. H. says this:

That editors and correspondents have been praising one another simply that they may receive the same in return, I don't believe. All the kind things that I have said of others have come from my heart—they have been honest, and have been uttered with no hope or thought that I should receive praise in return unless I deserved it.

Bro. Hutchinson has expressed our own sentiments exactly in the above paragraph. Whatever we have said in these columns in praise of our friends surely were the sincere expressions of our best nature, and

without the slightest expectation of "praise in return." We feel certain that all who are acquainted with us, well know that we don't hesitate to "call a spade a spade," when it is necessary, and also that we are just as free to bestow praise when and where we feel that it is deserved.

After all, that so-called "mutual admiration society" is pretty much of a myth. We have already devoted too much space in the "American Bee Journal" to a discussion of this particular specimen of mythology, and trust our readers will excuse this one more reference to it.

Mrs. S. M. Brooks and her husband keep bees about 5 miles west of the Court House building in the city of Chicago. Their apiary consists of 30 colonies at present, and their crop this year will amount to about 2,000 pounds, nearly all in the comb. For their comb honey they get 18 cents cash per pound at the grocery store near them, or 20 cents a section when called for at their door. All their honey is sold in the home market, hence the good price secured. Sweet clover is the principal source from which their surplus is obtained, an abundance of it being found around Chicago. They have had as high as nearly 3,000 pounds of honey in a season.

All of which is pretty good for a city apiary.

Bro. Thomas G. Newman, we are glad to learn, has about recovered from the severe assaults of his old enemy—"la grippe." In the November "Illustrated Home Journal," he says this, in referring to Bro. E. R. Root's recent attack from the same heartless "gripper:"

Having had it for six years, we know how to sympathize with our brother. We hope it will not take so long for him to conquer it as it did in our case. We are thankful to state that we are now about through with it.

Take a Sleigh-Ride as soon as the snow falls in sufficient quantity. See the buggy-sleigh offered on page 638 in connection with a year's subscription to the "American Bee Journal." We don't know of a cheaper sleigh, and equally good. It is also a no-tip-over affair. The "beautiful snow" will soon be here—better get ready to "take a good slide!"

Some Stolen Straws.—We find the following among Dr. Miller's "Stray Straws" in "Gleanings" for Oct. 15th:

"Honey-plant" is a common term in this country, and "bee-flower" stands for the same thing in England.

To shake bees off a heavy comb, hold the frame with both hands; if the comb is light, better hold it with the left hand, and pound with the right fist on the left.

In shipping bees, C. Dadant says, in "Revue," he would give no water, no pollen, no brood, only *sealed* honey. All this to avoid having the bees' intestines distended.

A writer in "Schweizerische Bienenzeitung" says bees don't propolize their hives for warmth, but as protection against the bee-moth, closing the cracks where eggs might be laid.

To avoid cracks in cakes of wax, don't let the outside cool rapidly. Cover a cloth and board over the dish while cooling, or let it stand in a stove oven while the fire dies out over night.

Gerstung says extracting during fruit-bloom is good, as returning the extracted combs to be cleaned up excites brood-rearing, but the same thing is not advisable in the main harvest, as it excites swarming.

Remember, when the robbers are troublesome, do anything, *anything*, rather than take out of their way the thing they are robbing, without leaving something in its place. Outside appearances must remain unchanged.

Eggs, 2,000 daily, is only an average for a good queen. Before the development of her ovaries she weighs .2 gram; 2,000 eggs weigh .42 gram, so she lays more than twice her own weight of eggs daily. But the workers digest her food for her.

A balled queen, we are told to release by blowing smoke on the ball. But there's a right and a wrong way. Hold the nozzle of the smoker close to the ball, and blow hot smoke on them, and you might as well step on the ball. Hold your smoker at a distance, and blow cold smoke on the bees, and all will be lovely.

"Fegling" is the German name for a kind of artificial swarm originating with Gravenhorst, and indorsed by Gerstung as coming nearest to a natural swarm. From a strong colony, take one frame of brood, with adhering bees and queen; put in empty hive on a new stand; fill out with partly built combs; brush into it all the bees, and trust old bees to return to the old stand and rear a queen. Hardly looks right, does it? But remember Gravenhorst is no spring chicken.

Handsome Sections have been received at this office as samples, made by Mr. O. H. Townsend, of Alamo, Mich. They are nice enough for any one.

Bees and Honey in England.—

We find the following from a "Country Gentleman" correspondent in Sussex, England, dated Sept. 15th:

We poor bee-folks have had a disappointing summer; the season opened early, and swarms came freely, even under all the anti-swarming aids of the day. Honey was rapidly stored, and sale in sections promised well; but wet, or rather "broken," weather followed, and the busy workers got disappointed, as they could do no more than hold their own, gathering on one fine day what was needed for sustenance in the three or four stormy or wet days that followed. So the clover and summer-flowers' season went, and the heather followed, but with no better encouragement, for it is now fast going off bloom on the moors, and little good is done. There will be a moderate supply of "run honey," but of sections next to none. This enhances the value in the neighboring fashionable towns, Brighton, Eastbourne, and Tunbridge Wells, where there is a ready market; but the increased price will not by any means atone for a deficient yield.

I notice with satisfaction one new profession which apiculture has introduced. Each district has its perambulating "professional," who, for a very modest charge, oversees the colonies, "drives" the swarms, removes the honey, and advises as to all future management.

Mr. T. B. Terry—Ohio's famous farmer—attended the first evening session of the St. Joseph convention, and delivered a most helpful and entertaining talk on the great value of growing clover on farm lands as a renovator and fertilizer of the soil. The attractive feature of Mr. Terry's talk was the fact that he spoke from personal experience. He had thoroughly tried and clearly proven on his own farm what he presented to his hearers. He was employed to speak at some 40 farmers' institutes in Missouri this fall, and no doubt if his instructions are well followed out, farming in that State will be made very profitable in a few years. We very much enjoyed meeting Mr. Terry, and listening to what he had to say.

Foul Brood.—The editor of the "Australian Bee-Bulletin," in the September number, gives this account of a little experience with foul brood:

We have had a little foul brood experience that may be interesting. We visited our out-apiary on July 31, and discovered foul brood bad in No. 2 hive. The day had been fine, but as we were looking at this

hive, a cold wind came up from the sea, accompanied with drizzling rain. The foul brood was in two frames, and it was a pitiable sight to see. We hastily cut out all the affected brood and threw it in the fire; procured the sprayer, filled it with carbolic acid (1 part in 17), and poured it well into the combs and about the hive. The bees were soon all outside. We covered the bees and hive with bagging, and they were back in the hive the next day. On Sept. 14 it was one of the most prosperous colonies in the yard—not a trace of foul brood in it. A good sprayer is a necessity in every apiary. That alone will reach the bottom of the cells, where the home of the disease is.

Mr. J. C. Wallenmeyer, of Evansville, Ind., we are pleased to learn, secured the 1st premium on the best display of honey, and diploma for best display of apian implements, at the big Fair held in Evansville, Ind., this fall; also 1st premium on best comb honey, 1st on best extracted, and 1st on best display of honey. He also took the 1st premium for the best imported Italian queen at the New Harmony, Ind., Fair. Bees in Mr. W.'s locality were still gathering nectar from white aster on Oct. 17. Their first killing frost set in on Oct. 14.

The Nebraska Bee-Keeper for October was nearly wholly devoted to quite a full report of the Nebraska State Bee-Keepers' convention, held at Lincoln, in September. Editor Stilson said that on account of too much State and County Fair business, and three bee-conventions which he had attended the past few weeks, the October number of his paper was very late. He surely had a good excuse, and no doubt his readers will overlook the delay this time, and—give him another chance!

Biggle Berry Book.—This number 2 of the Biggle Farm Library, is published by Wilmer Atkinson Co., Philadelphia, Pa. It is edited by Judge Jacob Biggle, a practical berry-grower and berry-lover, who has arranged in a systematic and attractive way not only what he has to say himself, but also the valuable advice and experience of many leading berry experts of the country who have contributed to its pages. It contains 144 pages, neatly bound in cloth, price, 50 cents.

“Long live the ‘American Bee Journal.’”—M. D. Andes, of Tennessee, Oct. 29, 1894.

THE AMERICAN BEE JOURNAL

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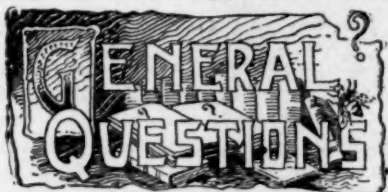
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ANSWERED BY

DR. C. C. MILLER,
MARENGO, ILL.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

Does the Queen Will It?

If the queen wills the sex of her eggs, why does she will to lay a male egg, for we know she needs no male herself; neither is she inclined to accommodate other queens? F. C. M.

ANSWER.—Now you've got to the spot where I don't know. I don't know whether the queen wills the sex of the egg, and if she does I don't know why, and I don't know whether she knows why. "We know she needs no male herself," but I don't know that she knows that. While she may be on friendly terms with other queens, I don't know but what she is "inclined to accommodate other queens," provided they are her own daughters. In fact this is one of the many subjects about which I don't know.

Why Did the Queens Die?

What caused the death of my queens? I clipped the wings of all of them. On July 21 one colony cast a swarm, and on July 23 another colony cast a swarm. The queens died in half a minute after they came out of the hive. I was present the first time the bees came out to swarm, and I saw the queen coming out swiftly, and turning round on the ground a moment, instantly died. Both queens acted the same, and died. First I thought she had jumped down from the frame and struck her head against the hive-bottom, and split her skull. But since then I have thought it came from

the sun, as it was 103°, and the ground was warm, and no fresh air. She had no wings to vibrate so she could get some fresh air. What do you think of it? A. P. C.

ANSWER.—I don't know what to think. I don't think the queen's wing being clipped would make an appreciable difference as to keeping cool. I never saw one ventilating. The queen's wing being clipped, the swarm might be delayed till a young queen emerged, and the young queen might sting the old one, but in that case she would hardly come out of the hive in such a lively manner. I give it up. If any one knows, let him tell.

Plan of Uniting Colonies.

In uniting bees, how would it do to take the queen away from one colony, put a screen on top of the hive the queen is in, then in the evening, when the bees are all in, take the queenless colony and set it on top of the hive with the screen on it, with the bottom-board off the upper story? After they have been there say 24 hours, open a small hole in the screen from $\frac{1}{4}$ to $\frac{5}{16}$ inch in diameter, then in 24 hours more draw out the screen and let them have the run of both hives. A. P. R.

ANSWER.—I think the plan will work satisfactorily, as it is much like what has been advised in the "American Bee Journal."

Fears Queenlessness.

I have one colony of bees that has rejected their new queen. I have given them a frame of brood and eggs every 8 or 9 days. I sent to Arkansas for a queen for them, but the breeder cannot send it this fall, owing to sickness. How would it do to let the colony go as it is till spring? I suppose they will have a queen, but she won't be mated, as the drones are all gone. Please tell me how to manage such a colony. W. W. P.

Choctaw City, Okla. T.

ANSWER.—It's hard to say what you ought to do without knowing whether your colony has a queen or not. It's quite possible that you may find next spring that they have a good queen.

Although drones are all gone, she may have mated earlier and not commenced laying very promptly, or there may have been drones that you didn't see. If there's a fairly strong colony, I think I would let them alone to winter over.

Refuses to Take Winter Stores.

Once a week the "American Bee Journal" comes to our house. I suppose we could get along without it. So a man *might* worry through a Wisconsin winter without mittens, but he would lose more time slapping his hands to warm them, than the cost of mittens would amount to. So with the "Bee Journal"—one gets five times its cost in little "kinks."

I have one colony that for the past two months I have tried to get to store their winter supply, but nary a store. It is a good, strong colony, with one of Hutchinson's queens, and has had plenty of brood at all times. I have fed honey, both comb and extracted, granulated sugar syrup, both thick and thin, but they will not store more than four or five pounds. I would trot them in with another colony, only for their queen being an Italian.

The honey was a very light crop this year. I got 95 pounds from 13 colonies. My neighbor, with 45 colonies, took but 150 pounds of honey. Honey sells at 12½ cents for cash, or 15 cents in store trade.

I have taken the hives from their summer stands, and set them in a small building until time for cellaring; the bees are out on warm days, still gathering pollen.

E. G.

Cylon, Wis., Nov. 3.

ANSWER.—When a colony refuses to take winter stores when others do so freely, the first question that arises is whether they haven't had enough already. Still, there's a difference in my colonies about taking feed, and I can't tell why. If you had told *how* you gave the feed it would have been well.

When you gave comb honey, if you gave it in frames anywhere near their brood-nest, they may have felt satisfied with it there without disturbing it till they wanted it. But wherever it was, if you uncapped it, or daubed it over with honey in case it was not sealed, you might count pretty safely on their

cleaning it up, and putting it in reach of the brood-nest if needed there. I had a colony to which I gave some combs to empty, setting the combs under the colony, but they said it was all right there and let it alone. Then I set an empty hive over the hive containing the combs, and set the colony over the empty hive. The combs in the lower hive were then promptly emptied.

Sugar syrup will be taken down hot when it would be neglected cold.

One thing you could have done. When you found they would not take the feed, you could have given them filled combs from another colony, then fed up this latter—providing you had such a colony.

If you got them to take four or five pounds of syrup, and they had the chance to take more during two months, I shouldn't feel very uneasy but what they had enough to take them through till spring, then give them more. Remember the spring is the time when they consume stores more rapidly than in winter.

Seems to me I'd rather let the bees stay on their summer stands till put into the cellar.

Borage as a Honey-Plant.

Why don't some one say something about borage as a bee-plant? I have not seen a word regarding it in all that has been written on bee-pasturage. It began to blossom here with the basswood and continued until the drouth withered it, and as soon as the fall rains came it began again and lasted until we had a frost that froze ice as thick as window-glass. I do not know what the bees get from it, but it must be useful to them or they would not be fooling their time away on it when basswood is in bloom.

J. H. D.

Belleville, Wis.

Ans.—Borage is a well-known honey-plant, formerly more spoken of than now. I suppose less is spoken of it than would otherwise be if it were found in larger quantities, or if it were valuable for some other purpose than bee-pasture.

Read our great offer on page 610.



CONDUCTED BY
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Lesson No. 13.

(Continued from page 527.)

RECEPTACLES FOR HONEY—HOW TO PUT IT UP.

As we have now learned to produce honey, I will tell you how to put it up, and how to keep it. The best vessels for extracted honey are the 5-gallon square cans with screw caps, and two to a case. This is getting to be a standard package for extracted honey. But in the South, where cypress barrels are so cheap, and freight high on the cans from factories, 24-gallon kegs are extensively used, so the next best thing for extracted honey, to the tin cans, is the kegs. But we had better use none but the iron-bound, as the wood-bound kegs are likely to burst in shipping.

Right here I will give you a pointer that will save you some trouble and time: If you live near enough to a barrel factory, go and attend to your own barrels while being built, and have good ones put up, telling the cooper what you want them for, and after one head is put in, have your beeswax ready (or beeswax and paraffine will do, mixed half and half, but I don't like all paraffine, it doesn't stick tight enough), and pour in the melted wax, twirling the barrels in a way that they will be thinly coated with wax all over, and also give last head a coating before putting it in, and you will have a honey-barrel that will not leak if properly built, and honey will not soak up into the wood, nor will the wood injure the taste of the honey. And if your honey is ripe, as it should be, it will keep any length of time. I have heard mother say, the older the honey the better. She has kept it for 20 years, and it was still as good as at first.

The public, by some reason or other,

especially the consumers of honey, have come to believe it won't do to buy honey in large quantities, thinking it will sour and spoil. But it is a mistake, for good, ripe honey kept in a good vessel will keep for a life-time and be good. It will no doubt solidify, but it can be brought back to its liquid state by melting it in boiling water, by placing the vessel containing the honey in another with the water, and let it remain until all is melted; and the honey will be as clear and as good as the day it was put up.

I would keep the barrels in the cellar or some cool place, but a warm place will not hurt it, only the barrels may shrink, and eventually leak if kept where it is too warm. But a warm room will not affect the honey.

Now, the foregoing directions are for keeping honey for home use, and for you to tell your customers how to keep their honey when they buy a barrel or keg from you at a time. Of course I do not expect you to keep your honey any longer than you can find sale for it, and sometimes we may have our honey engaged before we extract it. You may say that people ought to know how to keep honey, but I tell you the public need schooling, and they look to you to tell them how, etc. Some bee-keepers fail to build up a honey (home) market just by not schooling people about honey, and being ready and free to advise.

Comb honey is somewhat more troublesome to keep than extracted, and ought to be kept in a warm, dry room instead of a cellar. Keeping section honey free from moth and ants in Southern countries is sure enough a problem. But I have kept it nice and good for years, by keeping it in tight cases on benches or tables, with the legs in water to keep ants from getting in it. Preserves can be kept free from ants the same way. Just place a table in the center of a small room, for instance, or any room, and keep the legs in pans of water, and a little kerosene oil put into each pan will make it all the better and surer, as ants can spoil honey quickly, so we cannot well be too careful.

Stone jars or crocks are splendid to keep honey in for family use, but are a little hard to keep covered tightly; but I can place a beeswaxed cloth over the top, then the cover, and it does splendidly. I have kept green fruit in jars for a season by sealing tight with beeswaxed cloths.

I am satisfied that if you will follow the above instructions, you will have no reason to complain about keeping honey.

JENNIE ATCHLEY



Keeping Sugar Syrup Ungranulated in the Combs.

Query 948.—1. What will keep sugar syrup from granulating in the combs? 2. If mixing honey is the best, what is next best, providing no honey is to be had?—Colo.

I don't know.—EUGENE SECOR.

Use a little tartaric acid.—DADANT & SON.

1. Mixing honey. 2. I don't know.—W. G. LARRABEE.

1. "I don't know." 2. "I don't know."—JAS. A. STONE.

1. Twenty-five per cent. of honey. 2. Tartaric acid.—B. TAYLOR.

1. I don't know. 2. Use granulated sugar syrup.—J. M. HAMBAUGH.

1. I don't know. 2. Honey has been my best remedy.—S. I. FREEBORN.

1. We mix honey with the syrup. 2. Make the syrup with the percolator.—E. FRANCE.

1. Plenty of water. 2. I prefer hard cakes of sugar for winter use.—EMERSON T. ABBOTT.

1. One-tenth part in bulk of honey added to syrup while hot. 2. Buy some extracted honey.—G. M. DOOLITTLE.

1. Tartaric acid; but I don't think such doctored syrup is good for the bees. 2. Granulated sugar.—J. P. H. BROWN.

1. Plenty of water, and feed early enough for bees to thicken it. Honey is good, and so is tartaric acid.—P. H. ELWOOD.

1. I've tried many things, but they have been failures in my hands. 2. I would try percolating, and report.—MRS. L. HARRISON.

Feeding the syrup quite thin during warm weather. If one-half honey is added it is as good as the best honey.—C. H. DIBBERN.

1. It is said a little honey mixed with it. 2. Tartaric acid—an even teaspoonful to 15 pounds of syrup. I have had no experience in this line.—MRS. J. N. HEATER.

I have had no trouble. I pour boiling water on the granulated sugar, stir until all is dissolved, and feed warm. If you boil the syrup, it is liable to granulate.—H. D. CUTTING.

1. Mixing $\frac{1}{4}$ honey is good. 2. I am inclined to the opinion that if the syrup is thin—say half sugar and half water—the bees will ripen it as much as they do nectar.—C. C. MILLER.

1. Adding tartaric acid or cream of tartar with the syrup. 2. As you virtually answer your first question with the second, I will say, use the acids.—MRS. JENNIE ATCHLEY.

1. I don't know certainly. Many methods have been given from time to time, but as I have never fed sugar for winter stores, I am unable to give a positive answer.—J. E. POND.

Mixing honey is the best, but I have had no trouble from granulation when well boiled, using a piece of tartaric acid the size of a hickory nut to each 10 pounds of sugar.—J. A. GREEN.

If you will make the syrup quite thin—simply dissolve the sugar in hot water—and let it set in a warm place for two or three days before you feed it to the bees, it will not granulate to hurt anything.—G. W. DEMAREE.

One-third honey, or use of tartaric acid. I presume percolating syrup $\frac{1}{4}$ sugar and $\frac{1}{2}$ water would not crystallize. The bees take it so dilute that it is more fully digested, and that is what keeps it from granulation.—A. J. COOK.

There may be something in the way the syrup is made. I never had any trouble with granulating in the combs, though I never used anything to prevent it; so I do not know whether honey or tartaric acid would be the better.—R. L. TAYLOR.

1. Do not use granulated sugar—coffee A is better. Have the syrup tolerably thin, not less than a pint of water to two pounds of sugar. I have had no trouble with the feed granulating. It is better not to feed very rapidly, and to do it early. 2. I have fed a mixed feed.—M. MARIN.

There is no sure remedy for the granulation of sugar in the combs; but when feeding becomes necessary (it is an evil at best), and there is no honey to be spared, I would fall back upon the best "A" sugar. It answers the purpose, and will sometimes save a colony. In preparing the syrup, be careful not to scorch the mixture—it is surely fatal to

the bees if fed in that condition. Feed honey when possible.—W. M. BARNUM.

Don't make the syrup too thick. It will winter the bees just as well if fed a little thin. No honey is required with the syrup to keep from granulating, but the honey adds to its good wintering qualities. Only the pollen-theory crank would keep all honey from the bees in winter.—G. L. TINKER.

Reports of Members of Illinois Bee-Keepers' Association.

I herewith send a report of the honey crop at the close of the season, from a portion of the members of the Illinois State Bee-Keepers' Association.

The answers which follow correspond with the questions by number:

1. How many colonies have you?
2. What are the prospects for a honey crop?
3. How much honey gathered to date?
4. Is the honey gathered No. 1 or not?

Thos. B. Allen, Stirrup Grove—1. 31. 2. Not good—no white clover. 3. About 36 pounds. 4. Not very good.

A. B. Anthony, Coleta—1. 26. 2. All right for next year. 3. 300 pounds of comb, 400 of extracted. 4. No. 1.

F. X. Arnold, Deer Plain—1. 102. 2. The crop is over. 3. About 3,300 lbs. 4. $\frac{3}{4}$ honey-dew, the remainder yellow, from fall flowers.

C. M. Beall, Clayton—1. 8. 2. We have had nice rains, and I think the bees will get enough to winter on. 3. None.

Peter Blunier, Roanoke—1. 52. 2. Season is past. 3. No surplus, but about enough to winter on. 4. Dark.

Jas. Bertram, Bristol—1. 12. 2. Fair for next year. 3. 180 lbs. of extracted. 4. No. 1 amber, mostly from Alsike and sweet clover.

M. Bevier, Bradford—1. 40. 2. Very poor. 3. 90 lbs. 4. Dark color.

S. N. Black, Clayton—1. 30. 2. Bees will require feeding to winter safely. 3. No honey gathered.

C. Covell, Buda—1. 35. 2. Fair, as the red clover bloom furnished honey this year. 3. Nearly 1,500 lbs. 4. Very good, but amber colored, being a mixture of basswood and red clover.

Dadant & Son, Hamilton—1. 350. 2. None. 3. None. 4. Have not harvested enough to make up for what feed they will need.

Peter Dahl, Granville—1. 135. 2. None. 3. 300 or 400 lbs. 4. No. 1.

P. J. England, Fancy Prairie—1. 28. 2. Bees are adding slowly to their stores. 3. 600 lbs. of extracted honey. 4. A shade below No. 1.

J. D. Everett, Oak Park—1. 30. 2. Good. 3. 900 lbs. 4. Yes.

E. T. Flanagan, Belleville—1. 250. 2. None—all over now. 3. 2,500 lbs. 4. No. 1 fall.

J. M. Hambaugh, Spring—1. 120. 2. Honey crop all in for this season. 3. Will be in the region of 7,500 lbs. 4. $\frac{1}{2}$ poor, balance fair, no gilt edge.

B. W. Hayck, Quincy—1. 97. 2. Fall season so far (Sept. 27) good. 3. 2,500 lbs., expect 1,000 more. 4. No. 1 fall.

Wm. Little, Marissa—1. 60. 2. Season past. 3. 600 lbs., and bees have enough to winter on.

Dr. C. C. Miller, Marengo—1. About 200. 2. Nix. 3. 20 lbs. 4. No.

Adna Phelps, Springfield—1. 10. 2. None at all. 3. None. 4. Answered above.

George Poindexter, Kenney—1. 73. 2. About $\frac{1}{4}$. 3. 250 lbs. 4. No. 1 heart's-ease.

James Poindexter, Bloomington—1. What would make about 160 full colonies. 2. All vanished. 3. No surplus—enough to winter on. 4. No. 1 heart's-ease mostly.

Daniel E. Robbins, Payson—1. 30. 2. None. 3. 225 lbs., basswood. 4. Very nice, as I only took the good, leaving honey-dew in the hives. A neighbor living nine miles south of me on the bottom, reports a fine flow from large smart-weed.

Geo. F. Robbins, Mechanicsburg—1. 64. 2. Rather late to prospect. 3. Get out! What! the only complete failure I have ever known in my 12 years of bee-keeping.

F. A. Snell, Milledgeville—1. 112. 2. Honey-flow over. 3. 1,500 lbs. 4. Very good.

P. E. Vandenburg, Jerseyville—1. 37. 2. Very poor. 3. About 100 lbs. of extracted. 4. Not what I call No. 1.

Walter M. Van Meter, Era, Tex.—1. 7. 2. Light. 3. 50 lbs. 4. Honey very good.

F. C. Vibert, Hockanum, Conn.—1. 7. 2. Poor—reasons given in July report. 3. 38 lbs. 4. No. 1.

E. Whittlesey, Pecatonica—1. 70. 2. The season is past. 3. 100 lbs. all told. 4. Third grade. Jas. A. STONE, Sec.

Bradfordton, Ill., Oct. 25.

Have You Read page 638 yet?



UNDERGROUND WINTERING OF BEES.

BY G. M. DOOLITTLE.

The wintering of bees in some kind of an underground repository has come to be quite an absorbing thought in the minds of all apiarists living north of latitude 40°, and, in my opinion, whoever lives in the year 2,000 will see nearly, if not all colonies of bees then existing north of this degree of latitude, wintered in an underground repository. If this is to be the case, it is of some moment that the ideas which are now assuming form on this subject be turned toward the best solving of this question.

Why I make a prophecy like the above is, that, with each succeeding year, the timber land of our country is growing less and less; so that when the year 2,000 is ushered in, very few if any of the forests which now exist here at the North will be allowed to stand. In these forests have been our protection from the extreme cold which now is beginning to be experienced in many localities where the timber is already becoming scarce. This timber has been of two-fold protection against cold, viz.: First, it holds the water in the ground so that many springs have existed which otherwise would not, and these springs where they abound, modify the air to a much larger extent than many suppose; and, second, the force of the wind is broken, so that when a warm day appears, the bees in a sunny nook, out of the wind, can have a nice flight, while those in an exposed situation can do no such thing.

Thirty-five years ago there was scarcely a winter in this locality when bees could not fly as often as once in six weeks, and the mill on the stream which flows, or used to flow, about 60 rods from where I live, was run by water nearly every day in the year. Now we often have from four to five months in which the bees cannot fly, and the mill is run nearly, if not quite half of the time with steam, on account of lack of water. I used to leave two-thirds of my bees on the summer stands, during winter, putting the other third into the cellar; now I put four-fifths of the bees into the cellar, leaving but one-fifth out, packing those out in the best possible manner; yet, with all my care, the cellar seems to be winning favor with each succeeding year.

Now, aside from the causes given above, there is another reason why the cellar is gaining favor. When I first began wintering bees in the cellar, I used one under the house in which we lived, while now I use one entirely away from any building, and this latter is so much superior to the former that it is winning my affections altogether. In what is it superior to the former? Chiefly in the fact that the temperature is entirely controlled without any interference of mine during the whole time that the bees are in their winter quarters. Some bee-keepers are favor-

able to a warm room overhead, presumably to keep the cellar warm, yet we find these same bee-keepers carrying ice into these cellars and opening doors at night to lower the temperature during warm spells in winter. Now, this is just where a cellar under a superstructure fails. Just in so far as a warm room is an advantage in extreme cold weather, it is of positive disadvantage in a warm spell in winter. Who wants to be obliged to keep a fire in or over a cellar all winter, every time the mercury sinks to zero? or open all doors and windows which the cellar contains, carry in ice, etc., every time the mercury rises to 50° or 60° above zero? There may be fun in the thing for a few times, but after a little it becomes "vanity and vexation of spirit."

And even after we have had all this trouble, our pets are not nearly as well off as they would have been had the temperature been kept evenly at 45°. Of course, where one has no other place in which to winter bees, they must do the best they can with what they have, but the point which I object to is that followed by some in recommending a thing which requires so much fussing and anxiety of thought, above something which requires nothing of the kind, and over one, which, after a thorough trial by even the most prejudiced, would be recommended as much superior to the old way.

Some claim the matter of a living-room over the bees has little if anything to do with the matter of good wintering to the bees. Such claim can only be made from lack of knowledge. For many years before I moved to where I now live, I wintered my bees in the cellar under the house we lived in, and during nearly every one of these winters there would come times when I had to build a fire in this cellar to keep it warm enough, or else open the doors at night, or carry in ice to keep it cool enough. Several times it kept warm so long that there was no snow or ice to be had, and the outside air during the night was warmer than the air in the cellar, then I had such a state of affairs in that cellar that caused me to declare that I would never try cellar-wintering again; bees roaring in the hives and flying out to the cellar-bottom and crawling about there until I feared I should lose the whole thing. At such times at this, where one is obliged to winter bees in such cellars, the only salvation is to have total darkness inside. But with a cellar entirely under ground, with earth overhead as well as on the bottom and at the sides, nothing of this kind ever occurs; and I would advise all, where it is possible, to construct such an underground cellar for wintering bees, where they are permanently located and have 25 or more colonies.

In the underground repository which I use, and which has been several times described in the bee-papers, the mercury rarely varies more than 2° all winter, standing at from 44° to 46° during the time the bees are in it, and as no ray of light ever enters, it is simply one long, dark night to the bees for five to six months, and they seem to winter perfectly.

The above is offered as suggestions to those about to build bee-cellars.

Borodino, N. Y.



MIGRATORY BEE-KEEPING—BEES BY THE POUND.

BY EDWIN BEVINS.

That article by John McArthur, on "Migratory Bee-Keeping," on page 306, makes me feel chilly. After Langstroth, Dadant and other writers have gotten a generation of bee-keepers educated away from the sulphur pit, here comes a man advocating the wholesale murder of bees to save the trouble and expense of wintering! I am glad the winter problem here is not as serious as it is in Toronto. Don't think I would kill the bees, though, if I lived in Labrador.

On page 405 of the "American Bee Journal" are to be found some questions and remarks by Mr. Chas. F. Jaessing, on this same subject of migratory bee-keeping. Mr. Jaessing seems to think that he would prefer the scheme outlined by Mr. McArthur, viz.: that of getting full colonies of bees from the South just before the honey harvest, to the one of getting the bees in lots of one or two pounds, and a queen with each lot. My experience in this matter is too limited to be of much value, but such as it is it inclines me to the belief that I would prefer Mr. Jaessing's plan to that of Mr. McArthur's, especially if the latter is to carry with it the slaughter of the bees every fall.

It was a question by Mr. Jaessing and its answer by Mrs. Atchley which appeared in the "American Bee Journal" last February, that led me to send South for two lots of bees by the pound. One was a two-pound lot, the other a three-pound lot, and each lot had a tested Italian queen. Each lot came on two frames of comb with just honey enough for the journey, and on arrival were placed in 8-frame dovetailed hives, between two frames of honey left by a colony which had become queenless and died the winter before.

These bees reached me May 19, and we fed sugar syrup every third or fourth day until about June 20, at which time they were as strong as any colonies in the yard, and there were some pretty strong ones. Sections were placed on the hives about June 20. This has been the poorest of all poor seasons for honey here, but the three-pound lot of bees completed more than sections enough to pay all its cost. The other fell a little short of that result. Had the season been an ordinarily good one, I am sure they would have paid two or three times their cost. I shall try the experiment next spring on a larger scale, but shall not send so far for the bees, and shall get untested queens—the expense can thus be considerably reduced. In the absence of frames of honey I will try frames of comb, and feed some extracted honey. I would not get bees in less than two-pound lots—three pounds would be better.

"SHAKE!"—Here's my ~~13~~, Mrs. Livingston. I am more than willing to shake hands with any bee-keeper who is in love with the bees for something besides the money they bring in. I might draw the line at the man or woman who would kill his or her bees just before winter, then buy a new supply in the spring to be slaughtered when cold weather comes again. To tell the truth, I do not believe such an idea would ever originate in the brain of a woman. Yes, I think I would shake hands with Mr. McArthur, for I think he is a very estimable man, notwithstanding his bee-killing notions. We will "have it out" in a friendly way when we meet at Toronto, next fall!

Leon, Iowa.



BEE-NOTES FROM AN OCTOGENARIAN.

BY E. L. HOLDEN.

Perhaps I cannot write anything that will interest the readers of the "American Bee Journal," as I am an old man, an octogenarian, but the editor gave a general invitation to his patrons to write, and as I have been in practice among bees for more than 60 years, I will give a few items of my experience.

I once wintered in my house a colony that I found in a tree. I cut out a section of the tree, about 2½ feet long, and set it in the buttery (or pantry, now), and fed them at the bottom every few days, by slipping a saucer of honey in through a door cut for the purpose. The next spring they were in excellent condition, though they had no chance for a flight all winter.

Next, I will astonish some by saying that I once hived a fine swarm in a hive

filled with comb and considerable honey of the last year. I moved the old hive away and put the new swarm on the old stand, with one tier of sections from the old hive, partly filled. In just seven days a swarm came out, and I hived them in a box till I could look over the combs they came from. On looking I found queen-cells, and as many as two were sealed cells; the eggs from which they came could not have been laid more than seven days, for the combs were old combs, remember. After cutting out all the queen-cells I returned the swarm, and gave them another tier of sections, and in two or three days gave another tier. The result was, I took over 180 pounds of section honey from that hive.

Now a few words about the Langstroth frames: In 1858 I bought of Rev. L. L. Langstroth the right to use his hive, for which I paid him \$5. At the same time I bought two hives, both of which I still have, and have just taken the trouble to measure them. The inside measurement of the hive is $18\frac{1}{4}$ inches one way, and $15\frac{3}{4}$ the other, and $10\frac{1}{2}$ deep. The frames are, inside measurement, $12\frac{1}{4}$ and $10\frac{1}{2}$ inches. This is the common hive, the other is his observing hive, of two or more stories, the frames are of the same length, but the depth is only $8\frac{1}{4}$ inches. These frames are the very ones I bought of Father Langstroth 36 years ago, and of course are the correct size of the Langstroth frames.

I have never been an extensive bee-keeper, but in connection with farming have always kept a few bees. I am now using a hive called, around here, the "Manning" hive.

North Clarendon, Vt.



BLACK COATS VS. STRIPED AND LEATHER COLOR.

BY ROBT. PESTELL.

"Fine feathers make fine birds," is an old adage. Is the opinion current amongst bee-keepers of the present time that fine jackets make fine bees? The black bees to-day are looked down upon as being an almost worthless race, if one is to be guided by the general tone of the bee-literature of the time, as great distinction being made between the races of blacks and Italians as between civilized beings and savages. Would this distinction be made were it not for the difference in color? I think not. The color of insects and animals is the one infallible nature clothes them with to meet the exigencies of their lives concomitant to their surroundings.

The honey-bee is not a native of this continent. We must, however, concede to the black the right of claiming fitness to surroundings by priority. I am a staunch friend to the blacks, appreciating their many good qualities. Foremost amongst them are their provident habits, they rarely breed up to their full income in early spring as do the Italians, consequently their lesser liability to spring dwindling; their superiority as masons compared to their more splendidly attired relatives; their lesser propensity to swarm, and their greater hardihood. Surely, they are a bee more fitted to survive in this climate when left solely to Nature's care than are other races which have been introduced recently. If admitting them to be so, why are they not as well, or better, adapted to be made a source of profit to the bee-keeper, as are the fashionables of to-day?

In a country like this—Mr. Vanderbilt's broad lands where many thousands of acres of forest abound—I am decidedly in favor of the blacks for the reasons above stated, added to which is the almost impossibility of keeping other races pure from crossing with the wild blacks which are quite numerous domiciled in the forests.

Writing "wild bees" unfolds the book of my memory at the page of a bee-conversation of a recent date with a gentleman acquaintance. I then stated as an opinion of mine that the blacks—or wild bees, as he termed them—were better

adapted to this section of country than other races. He said: "Don't you think the bees can be improved as have been the cattle?" My answer was, "When the white man first put in an appearance upon this continent, he commenced to exterminate the native cattle—the buffalo—filling at that time its place with cattle of the North Carolina scrub type. It is open to doubt whether there exists a bee better fitted to thrive in these surroundings than the present wild (as you term it) inhabitant of the forests. If this wild bee is destined to be exterminated, I hope its place will be occupied with something more desirable than the North Carolina scrub as compared to the buffalo. From this simile I infer it to be dangerous to supersede the old until the new is proven to be better."

It constantly proves one of the hardest lessons of our lives to judge our surroundings, including our bees, Sartor Resartus-like, notwithstanding the early lessons precepted by our copy-books, to do the contrary: "Judge not by appearances." Epictetus also tells us the nature and being of the good is not in external things—the utility of things, I take him to mean in the sense he uses the words, conducive to worthy and profitable ends. The surface of things is to be but little considered—it is to be discarded, to be dug beneath to find out how a matter hinges.

Cannot Mr. Doolittle tell us a little about the good qualities of the blacks, and cannot Dr. Miller also say why it is the stream of opinion is so tending to drift the same into oblivion? I admit they bear the character for being truculent, nettlers. "One touch of nature makes the world akin" (Shakespeare). I stung a man in Biltmore last summer—by mistake, I'm told—for which I got a quantity of smoke; in fact, I was fired, narrowly escaping getting much scorched by taking refuge behind a non-inflammable, barren substance.

Where is Mr. Thompson? Will he give a kink, or kick, on this subject?

Biltmore, N. C.



BEES IN THE SANDWICH ISLANDS.

BY REV. WILFORD HORSFALL.

I came to these islands about the beginning of May, 1894, and soon after coming to Lahina, the place I am now living in, I bought a colony of bees for \$4, transferring them to a frame hive. Since then I had a few swarms given to me by an old bee-keeper in the place, who says he cannot make honey pay. Three of these swarms I united so as to make one good, strong colony. The fourth I united to the colony I had bought in the first instance. Already these bees have produced some very delightful section honey, which is now being sold at one of the village stores.

The honey here is really beautiful, it is clear and white, with a distinct flavor. The wax is of snowy whiteness, without an approach to yellow. Never since I have kept bees have I seen such lovely sections as the 22 I took from the hives the other day. I am at a loss to discover from what flowers the bees get the greatest part of their honey, but it is evidently from trees. We have large numbers of tamarind, mango, algaroba, pandanus, royal palm, and many others. The humming of bees in the tamarind trees speak clearly of their being favorites; while, when the royal palms are in flower, one would think it was a swarm of bees, rather than bees attracted by nectar, hovering about the heavy plumes of flowers.

Bee-culture is making progress in these islands. I have been told of several persons who have apiaries, but whether they make them profitable I cannot say. Honolulu is well suited for bees, owing to its wealth of tropical trees and shrubs. Lahina, once the old capital, is not so well adapted to a large apiary, not to speak of apiaries. The settlement runs about two miles on the sea-beach. The houses

for the most part are surrounded with trees about 300 or 400 yards. Behind the beach road stretch sugar-fields for about a mile inland to where the mountains begin to rise. Here there is no vegetation. Nothing but dry earth and volcanic rocks. So then we only have a honey-field some two miles long by one broad. Here and there in the sugar-fields are houses surrounded with groves of trees. The bees are thus limited, but nevertheless they do well. But where a small apiary of 20 to 30 colonies would be successful, the apiary of 150 or 200 might be a failure. The old bee-keeper already referred to has about 30 colonies of bees in soap and other boxes, old style. Other people have bees, but one person has rarely more than two or three colonies.

The bees on this island are the ordinary English or German variety, but probably owing to the climate, having some decided characteristics of their own, the queens and drones are small, some drones ridiculously small. The bees are bad tempered, and require much smoke before they can be mastered. In fact, the tropical climate has caused them to degenerate. I feel sorry for the queens, that never seem to get any rest from their labors at all. I am informed by my friend, the same old bee-keeper, that there are two swarming seasons in the year.

Now, as to bee-pests: We have the moth, a much smaller one than the cousin in New Zealand, and certainly more destructive in its depredations. Any little bit of wax it can find is a happy find for it, and in the smallest chink of the hive is the the dreaded grub to be found. Then the Mynah birds, the Indian starling, make many a good feed on bees. They perch on or near the hives and pick the bees up in the coolest manner possible. Other pests, such as foul brood and bee-diarrhea are, I believe, unheard of here.

As to these islands being well adapted to bee-culture, I should have some doubts. Except in places here and there, there is no forest worthy of that name, and a greater part of the islands are barren and desolate to a degree. True, in the mountains there is a stunted forest, consisting of metrosideros and acacia trees, but too hard of access for any one to pick on it for any apiary. The famed Honolulu was at one time merely a desert. Every tree and shrub in and about the city has been introduced. And so on with other places. Nearly all our trees and flowers are foreign introduction, while the native flora is not to be found except occasionally on the mountains and in the gulches away from the ordinary haunts of man.—*Australian Bee-Bulletin.*



SOME CALIFORNIA NOTES.

[Mr. W. A. Pryal, one of our California friends, has been traveling around the northern part of the State lately with Messrs. J. H. Martin (Rambler) and H. E. Wilder. Mr. Pryal kindly sends us some notes on his trip, from which we select the following:—EDITOR.]

I found several small apiaries in Humboldt county. The part of the county where they were is not a great way from the ocean. I should think that it is not as favorable a place for bees as it is here in this vicinity, excepting, though, that there they seem to have a more sure yield of honey-producing flowers every year.

I saw in the "American Bee Journal" some months ago, where one of your correspondents disputed the fact that white clover was grown in this State. I knew that we had small patches of it through this county (Alameda), but I never knew until I was in Humboldt county, that it was cultivated as a crop. It is quite a dairy county; that is, a small portion of it is, for the county is almost "a complete aggregation" of mountains and big hills.

It is the great redwood county of this State. There it is where one should go

to see big trees. The account "by one of the younger Roots," in a recent issue of "Gleanings," about a sawmill in Michigan, does not begin to describe how logs are worked up into lumber in a California sawmill. I saw them take logs 8 or 10 feet in diameter and saw them up with band-saws. Great big slabs, one or two inches, would be taken off that would be of various sizes or widths, as the saw worked its way toward the center of the log. These big boards would be all handled by automatic machinery, and come out boards of the desired size. I did not see any precautions taken against fire; none are needed I should judge, as the logs are taken out of the water where they have lain for months or years. Then redwood is hard to burn (that is one of the reasons we have no big fires in this State; all our wooden buildings are mainly constructed of that wood). Another thing, the wood is not piled in big heaps at the mills; it is nearly all put aboard vessels at the mills about as fast as sawed, and shipped to various parts of the coast. I did not go into the forests where the biggest timber is to be seen; I saw some, however, that was 12 or more feet in diameter. I have seen bigger trees in Santa Cruz county, south of here—some 80 miles away. But enough of this; I was going to tell about the white clover.

In one section along and west of the Eel river, where the redwood trees had been cut off some years ago, and where potatoes had been grown for a number of years, there is nothing now but cow-ranches, so to speak. The land is low and rich. Then Humboldt county is one of the most rainy in the State. It is no uncommon thing there to have 70 or more inches of rain every year. You know that in the southern portion of the State they often fail to have 2 inches. Well, this abundance of rain always insures them crops of every thing they wish to raise. Both red and white clover have been sown, and they do well; the former having the preference. But white clover is now spreading in every direction, and it won't be long before the whole section of country along the lower Eel will be well covered with white clover. It is now growing all along the roadsides. It blooms the year through, and, of course, furnishes good pasturage for the bees.

If it were not for the weather being cool a good portion of the year, there would be enormous yields of honey in and around Ferndale. I was told by one bee-keeper near there, that it is no uncommon thing for him to take 100 pounds of honey from a new swarm. He said the honey is finer than that from the southern portion of the State. I do not know about this; I have only his word for it. He said that with a hundred colonies of bees he could make more money than is made off any three dairies in the valley.

I left the Rambler and Mr. Wilder at Hydesville, where they had been for five weeks, last Saturday morning. I took the steamer from Ferndale at 2:30 the same afternoon, and arrived in San Francisco a little after 8 the next evening. At 9 I took the ferry boat Piedmont (the finest ferry steamer in the world) for Oakland, and I arrived home at 11 o'clock that night. I was away a little over two months. I enjoyed the trip immensely. I saw more of the country than did my two friends, as they were more tied down to business than I was; they were taking pictures right and left in and about Hydesville.

I find that my own bees are in better condition than I expected to see them. The early rains we had brought out a lot of early, or, perhaps better, late flowers, which they have been collecting honey from very industriously. I think they will go through the winter better than they have usually done heretofore. Here, near the ocean, it is not so easy to carry bees over the winter as it is more inland. The climate is much damper in winter, as might be expected.

Mr. Wilder wanted to go to a part of Humboldt county where bear hunting is said to be good. He is about as anxious to kill a bear as anybody I ever saw. At

Hydesville I was talking with an old settler there who had killed 512 bears in and about that county. He has but one arm, and the other hand is crippled so that he has but one finger.

We have been having more rain this morning ; it looks as if it has set in to be quite a wet time. I think Mr. Martin does not like the climate in Humboldt county much now. He refers to it in a joking sort of way, as "The Land of the Mist." 'Tis rather foggy there at times, but that is what makes it such a good dairy country. Then it is not as cold as it is near the ocean. You have read of course that it is not cold along the coast of California, owing to the Japan current washing our coast. Here I might remark that the "current" of Japanese that has been flowing into China the past few months have been making things rather warm there, too!

North Temescal, Calif., Oct. 23.

W. A. PRYAL.



BEES AND FRUIT-BEE-DISEASES.

BY PROF. A. J. COOK.

(An essay read at the recent Farmers' Institute, in Santa Barbara, Calif.)

(Continued from page 589.)

FOUL BROOD.—This is a microbe, or fungoid malady, and is by all means the most fatal and serious of our bee-maladies. It was known to Aristotle, and has wiped out whole apiaries in our own time. Its true nature was not known until within a few years, as is true with all microbe diseases, and like most microbe maladies, it is terribly contagious and terribly fatal. But as we have come to know its true nature, intelligent, well-informed bee-keepers have lost their fear of this evil. So true is this, that Hon. R. L. Taylor, director of the Michigan apiarian experiment station, keeps a living sample in his apiary for his special study and amusement. He has no longer any fear at all of "foul brood." Is this not encouraging? Imagine in the future our keeping a little typhoid, tuberculosis, scarlet fever, diphtheria, or cholera, about the premises, with the fangs down, as a thing to play with. I see no reason why we may not, if knowledge can rob terrible diseases that now lie in wait for human victims. I believe it can and will.

"Foul brood" takes its name from the two facts—its disgusting odor, and the further fact that it attacks and destroys the brood while yet in the cell. It is not difficult to identify the disease. The cells, if capped over, will usually be punctured and sunken, or concave. The contents of the cell will have no form or semblance of a bee-larvæ. It will be brown in color, salvy in constituency, so if drawn by aid of a pin or toothpick from the cell, it strings out, and when it breaks from the pin, will fly back with some force. This brown, ropy, viscid, putrescent mass is sure evidence of "foul brood." The odor is also characteristic, but may not be noticeable in case of only a few affected bees. It is very disagreeable, and often betrays the disease as soon as we raise the cover from the hive. I have often received specimens of foul brood by mail in a close box, and wrapped closely with two or three layers of paper, and yet members of my household would detect the contents at once upon taking the package from the mail-carrier, by the odor alone.

CURE FOR FOUL BROOD.—The late Moses Quinby, the renowned pioneer bee-keeper of the United States, first gave the method to cure foul brood. His method is practically that which is everywhere so successful to-day, and, what is the more remarkable, he discovered the cure without knowing at all the true nature of the disease. As we now know it to be a microbe enemy, which we can detect and study with our microscopes, we easily understand why the "Quinby cure," as I should call it, the so-called starvation method of cure, is so entirely effective.

To treat this disease the bee-keeper should be a man of rare good sense and intelligence, who has studied the disease until he knows its exact course and nature, like Mr. R. L. Taylor; or else he should visit some first-class hospital and see with what care the operating surgeon disinfects his hands, his bandages, his instruments, everything he uses, before he commences his surgical operation. The realizing sense that the microbes are infinitesimally small, and that the escape of one from a diseased colony to a healthy one as surely carries the malady, will alone insure the caution requisite to treat safely this evil. Unless one will use every caution to prevent spread, it is doubtless wisest, as some have advised, to burn up all affected colonies. But this is unnecessary. It is wiser to use all care and precaution, and wipe the disease entirely out, root and branch.

The method is to drum the bees from the hive into any box, and set them in a cellar or other cool dark place for 48 hours, and then hive in a clean hive on comb foundation. Drumming the bees out causes them to fill with honey, and secures them from the hive without any danger of scattering the honey which must be entirely avoided. This should be done when the bees are busy gathering, so that no robbing will occur, and the bees can get food when hived on the foundation. Else it may be done under a bee tent, or late in the day when the bees are not flying, and the transferred colonies must be fed. The old hive must be set aside where no bees can possibly get at it for 25 days, when all the young bees will be developed, when the operation can be repeated and a second colony secured, which will have, of course, a young queen.

The honey may now be extracted and boiled, the combs melted into wax, and the hive thoroughly burned out by use of kerosene or straw, or else boiled. In all this, great care must be exercised that no bees get to the honey or hive until they are entirely disinfected. Of course there is no great difficulty in this. But it does require a use of the wits and exceeding caution, which many having not used have signally failed, and so have condemned a method instead of their own incautious procedure.

Mr. Taylor always keeps dilute carbolic acid in a dish ready to wash his hands after handling a colony with "foul brood," before he touches another hive. We have only to remember that the honey and cells of the diseased colony have myriads of the microbes, and that if these gain admittance into another hive, either by our careless handling, or the bees carrying honey, then the disease is spread. Thus, attempting to cure by this method without great caution, only spreads the disease and makes a very bad matter infinitely worse.

In closing, let me say that Southern California is the bee-keepers' and fruit-growers' paradise. As in balmy Italy, so here, there should be fullest reciprocity between these classes; each needs the other, and for either to drive the other away is really killing the goose that lays the golden eggs. Claremont, Calif.



THE ABSCONDING OF SWARMS.

BY LEWIS K. SMITH.

In a recent number of the "American Bee Journal," T. J. Lusk desires the ideas of other bee-keepers about the cause of his numerous swarms leaving. He lives in Louisiana, near an immense swamp where bee-forage is abundant. He thinks they are properly cared for, but that "they want to swim in the honey in the swamps."

While my surroundings are not so favorable for honey, and there is no tempting ocean of honey near by, still I think perhaps my experience may be beneficial to Mr. Lusk and others.

In the first place, I will say that I never lose a swarm when I take all the precautions that appear necessary at the time. I am governed more or less by the season—whether early or late—the kind of weather, the size of the swarm, etc. When swarming-time approaches, my hives—10-frame dovetailed—are prepared, ready at a moment's notice, and at once I proceed to business when the swarm settles. If two or three come out near the same time, and do not cluster together, I first hive those most exposed to the sunshine, after giving each swarm a good drenching with cool water sweetened with granulated sugar. I always put one or two frames of *unsealed worker-brood* into the hive, being sure there is no queen-cell on either of them.

Give the bees a large entrance, sprinkle them well with sweetened water, and, if a hot day, give the outside of the hive a generous dose of the same. As soon as they have about all entered, remove the hive to a shady place some distance away. Be sure of abundance of ventilation at the bottom, having the hive much more elevated from the bottom-board than you intend it to remain permanently. Have the hive-cover to fit well, so there shall be no light from any place except the bottom.

Another important consideration is to have abundant room, especially if the swarm is large, or the weather warm. This you can provide by empty supers, or one or two empty brood-chambers without combs, on top of the hive you intend them to occupy permanently. After a few days you can regulate the room as required. Abundance of room, shade, ventilation, sweet water, etc., always save them for me, and I would be glad to hear whether they charm Mr. Lusk's bees from their inclination to hie away to the swamps.

Gainesboro, Tenn.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Dr. Gallup and "Business."

MR. EDITOR:—What has become of our old friend that wrote such charming letters from Santa Ana, California? I hope he does not intend to keep mum all the rest of his life! Say, Doctor, you are too old a man to be squelched by one nervous man's growling. I don't believe one other reader of the "American Bee Journal" feels just as that awful "busy" man did. I believe he is so very terribly busy that he eats concentrated foods, and—well, it don't seem to agree with him very well. You see, he does not eat soups, vegetables, fruits, etc.—it takes too much time, so he uses them dessicated. I believe all the other bee-keep-

ers are interested in the surroundings and the families of the contributors who do so much to help us on to success.

MRS. B. J. LIVINGSTON.

Center Chain, Minn., Nov. 1.

[Why, dear Mrs. Livingston, it takes more than "Business" to "squelch" Dr. Gallup. He's not the squelching kind. We had a personal letter from Dr. G. a few weeks ago, saying he had been so very busy that he didn't have time to write, but thought he would soon get around to it again. Oh, no, Dr. Gallup don't "go down" so easily as one might think, for he's not quite 75 years young yet! We say "young," for in heart he'll never grow "old."—EDITOR.]

A Kind of Flies.

Enclosed please find insects, and if agreeable, please inform me what they are. I have noticed quite a number flying about my yard, and upon the flowers. Their appearance resembles bees, to some extent, and they appear to gather the nectar from the flowers. On opening my hives a few weeks ago, just at the close of the honey-flow, several flew immediately on the frames. One that I

watched staid there for a minute or more, before it was driven away, and busied itself with the honey in uncapped cells. Many here have noticed them, but do not know what they are, more than to call them "flies." W. G. G.

Providence, R. I.

[We sent the insects to Prof. Cook, who says this about them:—EDITOR.]

The insects sent are *Syrphus* flies. They like sweets, and are usually seen about flowers. I have never before heard of their visiting hives. They are evidently thieving. They like the sweet. The maggots feed on plant-lice and do much good. The flies mimic bees very closely, which I remark upon in my "Manual."—A. J. Cook.

Bees Did Fairly Well.

My bees have done fairly well the past season. I took off some 800 pounds from 30 colonies. There was no swarming.

D. C. WILSON.

Viola, Iowa, Nov. 1.

Poor Season for Honey.

My report for 1894 is as follows: I commenced the spring with 24 colonies, and increased to 25, all in good condition for winter. I got about 500 pounds of extracted honey of good quality, mostly gathered from fall flowers. The season of 1894 has been a poor one for honey.

FRED BECHLY.

Searsboro, Iowa, Oct. 30.

Bees Way Up North.

As I have never seen any reports from bee-keepers in the "American Bee Journal" living as far north as I do, I thought perhaps it would interest somebody to know that bees can be kept up here at a very good profit. Of course, last summer was the first time that I had bees enough to make a little showing. I am located 22 miles from Escanaba, a seaport town on Green Bay—the most northerly point, about the 46th degree north Latitude.

I took the bees out of the cellar April 15, 1894, after being in there 5 months, and found them all in nice condition. On April 17 they began carrying in pollen. They built up nicely, and the first one swarmed on May 25, in spite of the heavy frost we had in the forepart of May, which killed all fruit-bloom. The crop from 7 colonies, spring count, was

400 pounds of comb honey, and 360 of extracted, all white and first class. I have not one pound of dark honey. I increased to 21 colonies. I have doubled up and sold colonies to reduce the number. I have now 11 colonies which I will put into the cellar about the middle of November, and I am anxiously looking towards spring.

My bees are mostly Carniolans. They are a good, hardy bee, quiet in handling, but very much inclined to swarm. I think I will like the Italians better, as they will stay together in larger force and work, without swarming.

I have kept bees here for four years, and have read the "American Bee Journal" steadily, and I attribute my success largely to it. I cannot afford to keep bees without the "Old Reliable."

NICHOLAS PETERSON.

Spalding, Mich., Oct. 29.

All Heavy for Winter.

My crop of honey for the season of 1894 is 1,400 pounds, from 84 colonies, with an increase of 12 colonies. All the colonies are heavy for winter.

O. H. TOWNSEND.

Alamo, Mich., Nov. 5.

A Good Crop—Considering.

My bees have done well the past season, considering the long drouth we had through the months of July and August. Buckwheat was almost a total failure. My year's crop figures up 900 pounds, light and dark, in one-pound sections. My number of colonies was 26, or an average of 34½ pounds per colony.

CHAS. C. CHAMBERLIN.

Romeo, Mich., Nov. 1.

Slats in Section-Holders.

Do slats in section-holders sag in an objectionable manner? is a question that has been asked. As this part of bee-keeping has come under my observation as a honey-producer, I will give my experience, which is this:

In a locality where bees gather propolis, the sections do not rest on the slats heavy enough to sag them, and if the bees did not glue sections and separators together with the super, the slats would sag, as long as the sections depended on the slats for support, unless they are ¾ of an inch or thicker. But I do not look upon the slats as support for sections, as I wedge the sections in the

super, and use the slats merely for a protection from bee-glue and travel-stain.

If anybody knows of a better way of keeping the sections clean while in the hive, please let us hear it through the "American Bee Journal." The slats I use are only $\frac{3}{8}$ inch thick. When I bought them they were $\frac{3}{4}$ inch, but I had them ripped on a bandsaw and now like them.

AUGUST BARTZ.

Chippewa Falls, Wis.

Bees Did Fairly Well.

I have been keeping bees three years. I found a bee-tree in March, 1891, and got a bee-man to put them into a Langstroth hive for me in June. I have increased and bought to the number of 22 colonies, which are in good condition for winter, all packed nicely. I manufacture all my own hives and frames. My bees are all Italians except one colony, which are Carniolans. My bees averaged 15 pounds per colony this season. The drouth cut the honey crop short here in Kentucky.

I couldn't keep bees without the "American Bee Journal." I think it is the best bee-paper printed.

S. T. APPLEGATE.

Tollesboro, Ky., Nov. 5.

Some Apiarian Suggestions.

The weather the past three or four days has been fine, and to-day is one of the most beautiful ones known at this season of the year in this vicinity in many years. There has been but one frost of any account yet, and that did not reach the hills. Pastures are more like June than the last of October. A few flowers are left yet, and it is a rare treat to see the bees gathering honey and pollen from mallows in the yard.

Not being in the business just now, I cannot say how bees will go into winter quarters. Probably they are not strong in bees. One great trouble here, the last ten years or more, has been too dry nearly every fall. This stops brood-rearing and causes weak colonies unless they are strengthened by doubling. Probably others will take exceptions to late breeding, etc., but as I never lost a colony in several years, I do not care how I get the bees, only that the colony is strong.

I cannot give full particulars of the yield this year, but it is below the average.

I wish to say right here that if you

are in the business of bee-keeping, and have any aptness or liking for it, *stick to it*. Of course, there are times that are vexatious, etc., but one will never be satisfied without bees after getting thoroughly interested in them. Among some other things I did not fancy when I kept bees, jealous, bee-bungling neighbors that did not get much more honey from theirs than they would from yellow jackets, laid almost everything to my bees. If a person was stung a mile from my apiary, it was one of my bees. Of course! and it is mighty lucky I did not have any during the past two or three years of financial and business gloom, or they would have been "hauled over the coals" for it! Well, I got rid of them, at a cheap price, and got cheated out of a part of them at that. I have never succeeded so well since—some way or other I could never fill in the time to get the same profits that I reaped from the bee-business, and I could not get my thoughts in shape for the press as usual.

It is very strange that more women do not study the business. They learn more readily, as a general thing, than men, and they stand higher in the estimation of the people than they would with most other trades.

J. H. ANDRE.

Lockwood, N. Y., Oct. 29.

In Good Condition for Winter.

We have not had a bit of honey for the last two years. Both last year and this I have fed for winter, and both seasons I lost in the summer by starvation, and would have lost every colony if I had not fed in the summer. Drouth and frost have ruined everything here this year, and it is a serious question how we are going to get through the winter. The bees are in *very* good condition now.

Adams, Nebr., Nov. 3. GEO. GALE.

Not Discouraged.

The past year was a partial failure in this locality for *good* honey. My 18 colonies produced about 800 pounds—200 pounds of it was good, but the balance was too dark to sell. They will have to consume it themselves, as I have given each colony between 30 and 40 pounds on which to winter, and as each is very strong with young bees, I have no fears of the results. Fortunately, the white clover is promising for next year, and we are not discouraged.

ROBT. B. WOODWARD, M. D.

Somerset, O., Nov. 3.

Gathered Honey-Dew.

My report for this year is not a good one. My bees did not swarm, and worse than that, gathered no honey. They gathered some honey-dew, which I fear will kill most of the bees in this locality next winter. I never saw such stuff in my life. It was black, stiff and stringy, and has a rank, strong taste. I would much rather the bees had not gathered it at all, so they could have stored some sugar syrup. I shall sow Alfalfa next spring, so the bees can gather honey in dry seasons. I have 20 colonies at present.

FRED BIESEMEIER.

Sterling, Nebr., Oct 28.

Laying Workers.

The prevailing opinion seems to be that laying workers are ordinary workers that take it into their heads to perpetuate a colony, and may appear at any time in any queenless colony, laying at will. I have had considerable experience with laying workers, and have never known them to appear except when they had larvæ only far advanced at the time they became queenless, or had such larvæ given them any time after. So I conclude they are the result of the bees trying to rear queens from larvæ which are too far advanced.

Ft. Lupton, Colo. I. W. BECKWITH.

OUR DOCTOR'S HINTS.

By F. L. PEIRO, M. D.

McVicker's Building,

CHICAGO, ILL.

Coughs—Cause and Cure.

This is the time of year coughs develop. The reason is found in the sudden changes of temperature, the inclemency of the weather, and the neglect of precautions to protect ourselves from these and other causes that conspire to this end. There are various degrees of coughs—some trivial, others serious; but even the least troublesome may, if neglected, become serious enough. The better way is always to care for, and cure, a cough whenever possible, and usually it is not difficult.

The principal factor in the cure of a cough is quiet, in a comfortably warm room, simple diet, and some soothing remedy. For a usual cough not attended with serious pain in the throat or chest, in young or adults, a mixture of nice ex-

tracted honey and a strong tea made of elderberries, half and half, boiled together for an hour, makes a very pleasant and effective syrup. A teaspoonful should be given every hour. For more severe coughs, those in which great scraping of the throat exists, with soreness of the lungs, a glassful of strong boneset tea with as much pure honey, boiled as before mentioned, and given as often, generally results in complete cure. If a dose of No. 11 from the Home Remedy Case (see page 610) is taken, three or four times per day, all the better.

Then there is that harsh, croupy cough of children, frequently experienced during these latter months of the year. A little exposure to the cold rains or sleet on their way to or from school ushers in those symptoms that every mother, on a farm, has witnessed, and never without more or less alarm. The child has had supper, complains of feeling chilly and drowsy, is put to bed—often between two cold sheets—(the worst beginning that can be made!) and after a fitful nap or two it wakes with a barking cough, a tightness in the throat and chest, a choking sensation that impels the child to sit up for more comfortable position. The pulse is too quick by 20 to 40 beats; the respiration is more rapid than usual; the speech is in gasps, and the child looks at objects it wants, rather than ask for them. It will, in this way, instinctively call for water, or more clothing. Its eyes are now wide open and staring—sleep has completely departed.

If you have one of the Home Remedy Cases, give the prescribed dose of No. 1, every half hour or less, and No. 13 every two hours. Also make a syrup of a pint of honey to a teaspoonful of Jamaica ginger. Shake well, and give a teaspoonful every half hour until the child is fully relieved, and gone to sleep. In this way a few doses of these Remedies save to child and mother much suffering and anxiety.

I know of nothing more dangerous than a bad cough that is not cared for. There is never knowing what results may follow, from pneumonia to consumption. A disposition that the less informed may have to make light of these facts, in no wise diminishes the force of consequences. The wise will act promptly, and lessen all risks.

There are other forms of coughs—the more seriously advanced and chronic, which are usually symptoms of some established disease of the throat or lungs, which we cannot dwell upon here, much as I would like to do, because of the great need, but such cases must have the utmost consideration of your family physician or specialist in this branch of practice.

Convention Notices.

WISCONSIN.—The next annual meeting of the Wisconsin Bee-Keepers' Association will be held at Madison, on Feb. 8th and 9th, 1895.
Madison, Wis. J. W. VANCE, Cor. Sec.

COLORADO.—The 15th annual meeting of the Colorado State Bee-Keepers' Association will be held on Monday and Tuesday, Jan. 21 and 22, 1895, in Denver. H. KNIGHT, Sec.
Littleton, Colo.

CALIFORNIA.—The next regular meeting of the Central California Bee-keepers' Association will be held on the first Wednesday in December, at Hanford, Calif. You are cordially invited to attend.
Lemoore, Calif. J. F. FLORY, Sec.

PENNSYLVANIA.—The Venango County Bee-Keepers' Association of northwestern Pennsylvania will hold their 2nd annual meeting in the City Hall at Franklin, Pa., on Jan. 28, 1895, at 1 o'clock p.m. All interested send for program.
Franklin, Pa. C. S. PIZER, Sec.

ILLINOIS.—The next annual meeting of the Northern Illinois Bee-Keepers' Association will be held on Dec. 18 and 19, 1894, in the Supervisor's room of the Court House, in Rockford, Ill. All interested are invited to attend.
New Milford, Ill. B. KENNEDY, Sec.

VERMONT.—The next annual convention of the Vermont Bee-Keepers' Association will be held in Middlebury, Vt., on Jan. 30 and 31, 1895. Programs will be prepared and mailed later. Let every Vermont bee-keeper begin now to prepare to attend, and all those who can reach Middlebury, whether you live in Vermont or not, we want you to come.
Barre, Vt. H. W. SCOTT, Sec.

INDIANA.—The Indiana State Bee-Keepers' Association will hold its fifteenth annual meeting at the State House, Indianapolis, on Jan. 9, 1895. There will be three sessions—morning, afternoon and evening. Several other associations will convene here at the same time, thus securing reduced rate of 1½ fare for the round trip. But a certificate must be asked for when purchasing your ticket. Programme will be issued in December.
WALTER S. POWDER, Pres.

Indianapolis, Ind.

N. E. OHIO AND N. W. PA.—The Northeastern Ohio and Northwestern Pennsylvania Bee-Keepers' Association will hold its next regular annual meeting in the parlors of Hotel St. Nicholas, at Corry, Pa., on Nov. 21 and 22, 1894. A good program has been arranged. Bring your questions for the question-box. The hotel is opposite Union depot; rates have been reduced to \$1.50 per day to those attending the convention. Programs can be had by addressing the Secretary. Everybody, especially ladies, is invited to attend.
Moslertown, Pa. GEO. SPITLER, Sec.

NORTH CAROLINA.—The Carolina Bee-Keepers Association will meet at the Court House in Charlotte, N. C., on Dec. 6, 1894, at 11 o'clock a.m. A full attendance is desired.
Steel Creek, N. C. A. L. BEACH, Sec.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.

Eight Numbers for 10 Cents.

Yes, we will send the last eight numbers of the "American Bee Journal" for 1894, to any new name, for only 10 cents (stamps or silver). Now, here's a good chance to get some of your bee-keeping friends started in taking the "Bee Journal" regularly. You just get them to read the eight numbers mentioned, and more than likely they will want to keep it up after that. If you have three bee-friends that you want should have the eight numbers, send us 25 cents with their names and addresses, and we will mail them to each. Remember this offer is for the last eight numbers of 1894—dated, Nov. 8, 15, 22 and 29; and Dec. 6, 13, 20 and 27.

If, then, at any time between now and Feb. 1, 1895, you can secure the subscriptions of these "short termers" for the year 1895, you can count them as new subscribers and get the premiums as per our offers on page 578 of this issue. Eight "short term" subscribers at 10 cents each, will count the same as one new subscriber for a year, in earning premiums.

If you wish sample copies to use in securing the "short term" or other subscribers, let us know, and we will be glad to mail them to you free.

We ought to add thousands of names to our list on this very low offer—8 numbers for 10 cents! *Now is the time for earnest work!*

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 43 South Water St.
R. A. BURNETT & Co., 163 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.
CHAS. ISRAEL & BROS., 110 Hudson St.
I. J. STRINGHAM, 105 Park Place.
FRANCIS H. LEGGETT & Co., 128 Franklin St.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.
CLEMONS-MASON Com. Co., 423 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Buffalo, N. Y.

BATTERSON & Co., 167 & 169 Scott St.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central ave.

Honey & Beeswax Market Quotations

CHICAGO, ILL., Sept. 17.—The honey market is quite active. We are getting good prices considering the hard times, owing to the reported scarcity of crop. We quote: Fancy white, 15c.; No. 1, 14c. Extracted, 6@7c. Beeswax, 25@28c. J. A. L.

CHICAGO, ILL., Oct. 25.—White clover honey continues to bring 15c. The receipts are about keeping pace with the demand. The quality is very satisfactory as a rule, being heavy and of good flavor. Extracted continues to sell chiefly at 6@7c., according to color, flavor and style of package. Beeswax scarce and in good demand at 27@28c. R. A. B & Co.

NEW YORK, N. Y., Oct. 25.—Comb honey arrives quite freely, our receipts up to date numbering 10,119 crates. The demand is fair. We quote: Fancy white, 1-lbs., 14c.; fair white, 12c.; buckwheat, 10c.; 2-lbs., 1@2c. less, according to quality. The market for extracted is dull, with plenty of stock. We quote: Basswood and white clover, 6@6½c.; Southern, 5@5½c. a gallon. Beeswax scarce and in good demand at 29c. H. B. & S.

KANSAS CITY, Mo., Sept. 8.—The supply of comb and extracted is very light with only fair demand. We quote: Fancy white, 15@16c.; amber, 11@12c.; dark, 10c. Extracted, white, 6½@7c.; amber, 6@6½c.; dark, 4½@5½c. Beeswax, 22c. H. & B.

NEW YORK, N. Y., Nov. 10.—The market for comb and extracted honey is good, and the supply equals the demand. Fancy clover and buckwheat sells best; off grades are quite as salable; and 2-pound sections are very little called for. We quote as follows: 1-pound fancy clover, 13@14c.; 2-pound, 12½@13c.; 1-pound white, 12@12½c.; 2-pound, 12c.; 1-pound fair, 10@11c.; 2-pound, 10@11c.; 1-pound buckwheat, 10@11c.; 2-pound, 9@10c. Extracted, clover and basswood, 6@6½c.; buckwheat, 5@5½c.; Southern, 5@6c. per gallon. Beeswax, scarce and in good demand at 29@30c. C. I. & B.

CINCINNATI, O., Nov. 8.—Demand is fair for extracted honey at 4@7c. There is a good demand for comb honey at 14@16c. for choice white.

Beeswax is in good demand at 22@27c. for good to choice yellow. C. F. M. & S.

KANSAS CITY, Mo., Oct. 4.—The receipt of comb honey in this market so far has not been very large, and demand is very good. We quote: No. 1 white, 1-lbs., 15c.; No. 2 white, 13@14c.; No. 1 amber, 14c.; No. 2 amber, 10@12c. Extracted, white, 6½@7c.; amber, 5@6½c. Beeswax, 25c. C. M. C. Co.

CHICAGO, ILL., Oct. 18.—We quote: Fancy white comb honey, 1-lbs., 15c.; No. 2 white, 13c.; buckwheat, 10c. With cooler weather, demand improving, and our stock on hand at the present time extremely light. Extracted, 5½@7c., depending upon quality and style of package. Beeswax, 28c. S. T. F. & Co.

ALBANY, N. Y., Sept. 21.—Honey in better demand, especially the high grades of white comb honey. We quote: No. 1 white, 14@15c.; No. 2 white, 13@14c.; Mixed white, 11@12c.; No. 1 buckwheat, 12@12½c.; No. 2 buckwheat, 11@11½c.; common, 10@11c. Extracted, white (Northern), 7@8c.; amber, 6½@7c.; buckwheat, 5½@6c. Beeswax, 27@

29c. Do not look for much of any change in these prices, and advise now to have honey on the market as early as possible for best prices. H. R. W.

BUFFALO, N. Y., Oct. 17.—The demand is improved, fancy moving somewhat better at 14@15c.; choice, 12@13c.; buckwheat and other, 9@10c. B. & Co.

CONVENTION DIRECTORY.

Time and place of meeting.

1894.
Nov. 21, 22—N. E. O. and N. W. Pa., at Corry, Pa. Geo. Splitter, Sec., Mosiertown, Pa.
Dec. 5.—Central California, at Hanford. J. F. Flory, Sec., Lemoore, Calif.
Dec. 6.—Carolina, at Charlotte, N. C. A. L. Beach, Sec., Steel Creek, N. C.
Dec. 18, 19—Northern Illinois, at Rockford, Ill. B. Kennedy, Sec., New Milford, Ill.
1895.
Jan. 9.—Indiana State, at Indianapolis, Ind. Walter S. Pouder, Pres., Indianapolis, Ind.
Jan. 21, 22—Colorado State, at Denver, Colo. H. Knight, Sec., Littleton, Colo.
Jan. 28.—Venango Co., at Franklin, Pa. C. S. Pizer, Sec., Franklin, Pa.
Jan. 30, 31.—Vermont, at Middlebury, Vt. H. W. Scott, Sec., Barre, Vt.
Feb. 8, 9.—Wisconsin, at Madison, Wis. J. W. Vance, Cor. Sec., Madison, Wis.
—, —.—North American, at Toronto, Can. Frank Benton, Sec., U. S. Dept. Agriculture, Washington, D. C.

[37] In order to have this table complete. Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

OFFICERS FOR 1895.

PRES.—R. F. Holtermann....Brantford, Ont.
VICE-PRES.—L. D. Stillson.....York, Nebr.
SECRETARY.—W. Z. Hutchinson....Flint, Mich.
TREASURER.—J. T. Calvert.....Medina, Ohio.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.
147 South Western Avenue.

Illinois Convention Reports.—

The Illinois State Bee-Keepers' Association still have a good many copies of their Second Annual Report on hand, and no postage to send them out. Any one sending eight cents in stamps to pay postage and wrapping, will receive a copy of same by mail; or seven cents in stamps will pay for a copy of the First Annual Report, if any one desires it. Address, Jas. A. Stone, Sec., Bradfordton, Ill.